

October 21, 2005

Ms. Michelle Moretti
Planning Advisor
Ministry of Municipal Affairs and Housing
777 Bay Street, 2nd Floor
Toronto, ON M5G 2E5

And

Ms. Brenda Stan
Town of Oakville Planning Services Department
P.O. Box 310, 1225 Trafalgar Road
Oakville, ON L6J 5A6

Dear Ms. Moretti and Ms. Stan:

**Re: Parkway Belt West Amendment (MMAH File No. 24-PBA-001-178) and
Local Official Plan and Zoning Amendments (Z.1529.02)
2322 to 2362 Upper Middle Road, Town of Oakville**

Subsequent to the meeting on August 24, 2005 at the Town of Oakville, Conservation Halton staff have reviewed additional information submitted by the applicant, including a plan prepared by KNY on September 19, 2005. Staff would like to note that the written scale on the KNY plan (1:300) does not match the scale bar (1:250).

Conservation Halton staff provide the following comments and recommendations, for the consideration of the Ministry of Municipal Affairs and Housing and the Town of Oakville, should they proceed with making a decision on the applications.

Section 1 - General Overview

1.1 Summary of Constraints

On January 5, 2005, Conservation Halton staff provided comments on the Parkway Belt West Plan proposal. Staff advised that the lands are located in the 14 Mile Creek Watershed, in which they contain and/or are adjacent to:

- a) A high constraint terrestrial corridor, high constraint fisheries corridor and terrestrial linkage/enhancement area identified in the Fourteen Mile Creek Main and West Branches Subwatershed Study;

- b) Two watercourses and their associated Regional Storm flood plains, valleys, and fish habitat;
- c) An Environmentally Sensitive Area;
- d) Significant portions of threatened habitat of redbreasted dace; and
- e) A potentially significant woodland.

Staff advised that we would recommend that all hazardous, natural heritage and setback areas remain designated as Public Open Space and Buffer Area in the Parkway Belt West Plan. Further to the Parkway Belt application, staff were circulated a proposed amendment to the Oakville Official Plan and Zoning By-law. Similarly, it is the opinion of staff that the natural hazards, natural heritage and setback areas should be designated/zoned as Open Space with site-specific policies on protection of these areas.

Conservation Halton staff would also support and encourage the dedication of the constraint areas to a public agency, such as the Town of Oakville. This recommendation would be consistent with the Fourteen Mile Creek Main and West Branches Subwatershed Plan, which recommends that Category 1 Lands be acquired and protected.

1.2 Comprehensive Constraint Line

The proponent has illustrated constraints including a comprehensive constraint line on the attached KNY Composite Site Drawing, in which staff provide the following overview:

- a) Staff are satisfied that flooding and erosion hazards are contained in the comprehensive constraint, but wish to emphasize that we are not satisfied with delineation of the meander belt and 30 metre setback for determining significant habitat of the threatened species redbreasted dace.
- b) Staff are satisfied that the comprehensive constraint provides an adequate buffer from the forested area.
- c) It is the opinion of staff that delineation of the meander belt and 30 metre setback proposed by the applicant is not correct, and as such, the comprehensive constraint is not appropriate for determining significant habitat of redbreasted dace. Staff note that for 2332 Upper Middle Road, the constraint line proposed does not include all of the incorrect meander belt and setback, delineated on the KNY drawing.

Although not Conservation Halton's responsibility, given the timeline for comments and that the applicant has not been able to address Conservation Halton's concerns to date that have been expressed as early as April 2005, staff have provided a suggestion as to where the

meander belt and 30 metre setback should be, based on the established standards and principles and the information available to us. This is illustrated on the attached Figure 1 dated October 18, 2005, and labeled as “Comprehensive Constraint Line as Recommended by Conservation Halton – October 2005.” As noted in Section 2.3, the suggested constraint is a conservative analysis and staff may accept a new meander belt width delineation from a professional engineer or qualified fluvial geomorphologist. Staff would also accept delineation of the significant habitat upon confirmation that the Ministry of Natural Resources is satisfied.

More detailed comments are provided in Section 2 on reddsides. Staff have also provided comments on the Regional Storm flood plain, fill removal, groundwater study, and other planning policies.

Section 2 – Threatened Species - Redside Dace

2.1 General

Further to the submission of an EIS Addendum dated May 10, 2005, written correspondence dated July 19, 2005 and August 10, 2005, and ongoing discussions with the applicant, Conservation Halton staff offer the following comments regarding ecological concerns of the applications.

Conservation Halton staff continue to have concerns regarding the meander belt and 30 metre setback delineated by the applicant. The meander belt width encompasses the area within which the creek has the potential to migrate. By using the meander belt width as the starting point for the setback, this ensures that an appropriate setback for reddsides will remain in place even if the creek migrates over time. As discussed previously, the meander belt width as shown on the site plan is inconsistent with the definition of survival habitat in the Redside Dace Recovery Strategy in that it does not ensure a minimum 30 metre setback from the creek in perpetuity.

The stretch of Fourteen Mile Creek between Upper Middle Road and the QEW currently supports one of the healthiest reddsides populations in Canada. Therefore, the protection of survival habitat on the property is of critical importance.

2.2 Provincial Policy Statement and setbacks from habitat

2.2.1 Provincial Policy Statement

Relevant policies and information from the 2005 Provincial Policy Statement, which are similar to the 1996 Provincial Policy Statement, include but are not limited to the

following:

- a) Section 2.1.3 a: Development and site alteration shall not be permitted in significant habitat of endangered species and threatened species.
- b) Section 2.1.5: Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.
- c) Section 2.1.6: Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 2.1.3, 2.1.4 and 2.1.5 unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.
- d) Section 6 - Definitions: '**Significant**' means in regard to the habitat of endangered species and threatened species, means the habitat, as approved by the Ontario Ministry of Natural Resources, that is necessary for the maintenance, survival, and/or the recovery of naturally occurring or reintroduced populations of endangered species or threatened species, and where those areas of occurrence are occupied or habitually occupied by the species during all or any part(s) of its life cycle.

2.2.2 Natural Heritage Reference Manual

The Natural Heritage Reference Manual (Ministry of Natural Resources, 1999) provides guidance on identification of significant habitat under Sections 2.3 and 2.4. For example:

- a) Section 2.3: This Section states that the amount of habitat required for the survival of an endangered or threatened species is normally determined on a case-by-case basis either:
 - i) by applying the information in species-specific status reports or recovery plans or guidelines, where they exist; or
 - ii) on the basis of expert biological advice where such plans or guidelines do not exist. Even where such plans and guidelines are available, expert biological advice will often be required to apply the information at a site level.

- b) Section 2.4: This Section states that the width of buffer strips will vary depending on the potential risk to fish habitat. For example, a larger buffer area may be required in areas where the potential risk to fish habitat is relatively high, due to steep slopes and highly erodible soils, or to protect the habitat of endangered and threatened fish species.

2.2.3 *Other*

Although the Redside Dace Recovery Strategy has not yet been approved, the absence of an ‘approved’ strategy does not preclude the need to act in the best interests of the species, based on the best available information at the time. The RENEW (Recovery of Nationally Endangered Wildlife) Recovery Handbook (ROMAN) is also used to guide recovery activities at a provincial level, and the document provides clear direction in this regard:

- Recovery actions may be undertaken at any point in the process, and should not be delayed until the strategy and action plan have been developed.

The Recovery Strategy is based on the best available scientific information, both from experts on the species (e.g. recovery team) and ongoing review of the literature. Even in the absence of a Strategy, as per the Provincial Policy Statement, the information that feeds into such a document is what is to be used to determine how to ensure that there is no development or site alteration in significant habitat and that development or site alteration on the adjacent lands does not negatively impact reidside dace. The habitat protection afforded by the Provincial Policy Statement is fully in force, and the recommendations in the Strategy, draft or otherwise, provide a summary of best management practices to achieve the required habitat protection.

Environment Canada’s recently released habitat restoration guidelines (Environment Canada 2004) provide an extensive compilation of peer-reviewed published scientific literature related to riparian buffers. The Report states:

- In conclusion, the recommended guideline is a minimum 30-metre wide naturally vegetated adjacent-lands area on each side of the watercourse. This minimum is strongly supported in the literature for riparian systems, but depending on site-specific parameters it may need to be greater to attain the desired level of function.

Staff note that there is increasing scientific support for this guideline to be expanded to 50 metres and this guideline may change in the future as more information becomes available.

A setback of 30 metres for coolwater streams has been applied for many years even without the presence of any species at risk. Redside dace populations continue to be lost from Ontario, thus it seems apparent that the setbacks traditionally used may not be adequate to protect the species. A setback from the meander belt width of a stream takes into account the long term protection of the species in that there will always be a minimum 30 metre buffer along the watercourse, even as it changes course over time. This long-term view is in keeping with direction provided in the Provincial Policy Statement, particularly Section 2.1.1 which states natural features and areas shall be protected for the long term.

2.3 Meander Belt Delineation

Conservation Halton engineering staff offer the following comments on the meander belt delineation. As part of the review, the following submissions from the applicant:

- Composite Site Drawing A100 received September 20, 2005.
- Letter from Mr. Gaza Gaspardy from Watershed Management Ecology dated July 19, 2005.
- EIS Addendum dated May 10, 2005 and completed by Watershed Management Ecology.

The Redside Dace Recovery Strategy Draft Guidelines dated January 31, 2005, does not differentiate between confined and unconfined systems, but indicates that the “meander belt is the land area on either side of a watercourse representing the furthest potential limit of channel migration.” Staff recommended in a July 5, 2005 letter that at a minimum, the toe erosion allowance be applied in addition to the existing bottom valley/flood plain width to account for long-term channel migration (i.e. 100 year).

Staff conducted further research on defining meander belt widths for confined systems. The Technical Guide for River and Stream Systems Erosion Hazard Limits (Ministry of Natural Resources, 2002) references the *Belt Width Delineation Procedures* by Parish Geomorphic Limited dated September 27, 2001, which addresses delineating meander belt widths for confined and partially confined systems.

The Parish Geomorphic Report deals with calculating the meander belt width for confined systems, where meander bends are adjacent to both valley walls within the reach and where the watercourse may be restricted from occupying its potential meander belt by the valley walls. The Report states that the top of the valley would be considered the limit of the meander belt, but to be more reasonable, it recommends that “the meander belt boundary is placed at an average distance between the top and bottom of the valley

walls along both sides of the watercourse.”

In partially confined systems, Page 18 of the Parish Geomorphic Report explains how to calculate the meander belt width for partially confined systems, where meander bends are adjacent to only one valley wall within the reach and the watercourse is restricted in migration and floodplain occupation along one side of the valley. The document states that the top of the valley would be considered to be the limit of the meander belt, but that to be more reasonable it recommends that “the meander belt should be adjusted to account for the irregularity of the valley wall such that the belt boundary can be situated both in the valley and at some point along the valley wall.”

Therefore, applying the meander belt width from the edge of the largest meander, where there is active erosion, as indicated on Drawing A100, would not be in accordance with the established standards and procedures. A discussion with MNR staff indicated that applying the 3 metres or the midway between the top of the valley and the bottom of the valley would be sufficient.

The meander belt width delineated by the applicant does not follow recommendations from the MNR Erosion Hazard Technical Guidelines or the Belt Width Delineation Procedures. Furthermore, it has not been demonstrated by either a Professional Engineer or a qualified fluvial geomorphologist that the meander belt is appropriate. Conservation Halton staff suggest that at a minimum, the meander belt width be adjusted as follows, which has been illustrated on the attached map and labeled as “Comprehensive Constraint Line as Recommended by Conservation Halton – October 2005”:

- a) Where the creek is located at the toe of the valley slope, a 3 metre setback from the edge of the creek and toe of slope be applied. This is consistent with the recommendation from the Long Term Stable Slope Line Report (October 18, 2004) by Soil Engineers Ltd.; and
- b) That in all other locations, the toe of the valley slope be used.

It should be noted that the above is a conservative analysis and staff may accept an alternative meander belt width delineation from a Professional Engineer or qualified fluvial geomorphologist. Staff would also accept delineation of the significant habitat upon confirmation that the Ministry of Natural Resources is satisfied.

Based on the information provided, Conservation Halton staff cannot establish the meander belt delineation at the western limits of the property (west of the location of the swimming pool). Staff note this is not necessary at this location, as it is within the comprehensive constraint area.

Section 3 - Flood Plain Mapping and Delineation

Conservation Halton staff reviewed the Floodline Mapping Update provided by Pitura Husson Limited dated August 4, 2005. Staff provided the proponent with HEC-2 modelling on July 25, 2005 for Fourteen Mile Creek. Staff note that the starting water surface elevations, Manning's "n" and flow rates were not changed from the original model. Five cross sections were also added between existing cross section 211.1 (located at Upper Middle Road) and 211.0 (downstream of the site where the creek and tributary meet). This section of the creek that flows adjacent to the above property had not been included in the original floodplain delineation. The added cross sections appear to be appropriate.

For the most part, the flood plain appears to be appropriately delineated on the contour information provided by the Town of Oakville. Staff note that the flood line at station 211.08 metres on the right bank (if facing upstream), appears to have been drawn at an elevation greater than 129 metres, although the flood elevation is 128.82 metres in this location.

Overall, staff are satisfied with the flood plain modelling provided but note that we require a submission stamped by a qualified Professional Engineer as well as a digital copy of the model created.

Section 4 - Fill Removal

The Long Term Stable Slope Line Report by Soil Engineers Limited dated October 18, 2004 indicated that all boreholes taken on May 26, 2004 (except borehole 6), had a layer of topsoil fill between 8 to 20 cm and that this would not be suitable for engineering applications but that it should not be buried. The Report appears to indicate that this layer would be stripped from the site. The Report then indicated that all boreholes have a layer of silty clay fill varying in depths of 0.7 to 2.1 m and states that it is not suitable for supporting foundations and that the fill should be inspected, sorted free of topsoil inclusions and aerated prior to using as structural backfill. This implies that this layer will be removed from the site and potentially be reused. Conservation Halton staff continue to request clarification on this matter, as well as to what extent this fill will be removed on the site and whether this will involve removing fill near the top of the bank. Given the timeline for comments on the Parkway Belt West application, staff will not request further information in this regard at this time, but recommend that it be addressed in determining the Official Plan and Zoning designations for the subject lands.

Section 5 - Groundwater Study

Conservation Halton staff requested that the potential for seasonal groundwater be investigated on site and that mitigation works be discussed in the event that there is seasonal groundwater. Staff note that the findings in the Long Term Stable Slope Line Reports (October 18, 2004 and April 28, 2005), which indicated that groundwater was not encountered on the site, were based on checking boreholes during and immediately

after completion of the boreholes. Staff would have anticipated that it would have been appropriate to install a monitoring well in some of the boreholes to allow for the monitoring of groundwater over an extended period, particularly considering the low permeability of the soils and the presence of a threatened species. It is our understanding that MNR will also be providing comments in this regard.

Section 6 – Parkway Belt West Plan

The subject lands are partly in the Public Use Area, and more specifically designated as Public Open Space and Buffer Area. It is the opinion of Conservation Halton that our comments and recommendations throughout this letter and previous correspondence would meet several goals, objectives and policies of the Parkway Belt West Plan. For example:

- Goals, Section 2.4: Provide a system of open space and recreational facilities linked with each other...
- Objectives, Section 3.1.3: Preserve prominent natural features, such as river valleys and the Niagara Escarpment, and protect other features, such as wooded areas, watercourses, and other points of interest.
- Implementation, Section 5.1: The Plan will be implemented through acquisition of land designated for public uses, through public undertakings, and through the control of land uses and other activities.
- Implementation, Section 5.1.3: Municipalities are not required to permit every land use that may be permitted under this Plan. By-laws implementing the Plan may be more restrictive than the provisions of the Plan, provided they are consistent with its intent and purpose.
- Public Use Area, Change of Uses, Section 5.4.1 h): Change of uses of land, buildings, and structures, subject to all natural features are preserved to the maximum possible degree.
- Public Use Area, Provincial Acquisition, Section 5.4.2 a): Most of the lands in the Public Use Area will be acquired by the Province and other public authorities.
- Burlington-Oakville Mini-belt Link, Objectives, Section 6.6.2
 - n): Provide for public open space along Bronte Creek, Fourteen Mile Creek...
 - o): Provide for integrated planning and development of a public open-space area comprising Bronte Creek Provincial Park, Fourteen Mile Creek Valley, and the lands between.

Section 7 – Town of Oakville Official Plan

The subject lands are designated as a Natural Feature in Figure F1 and F2 of the Town of Oakville Official Plan. The Official Plan contains numerous policies on Natural Areas.

For example:

- Part D, Section 4.3.2 r): The Town shall cooperate with Halton Region and the Conservation Authorities to identify, designate, protect, conserve and remediate newly identified and already identified natural features.
- Part D, Section 4.3.2.7 c): Development will not be permitted in the habitat of endangered or threatened species based on provincial and national scales of assessment.
- Part D, Section 4.3.3 a): The Town shall pursue the preservation, extension and enhancement of Natural Areas through a variety of methods including acquisition, density transfers, land exchange, long-term lease, easement agreements, placing conditions on approval and land trusts among other measures that may be at its disposal.

It is the opinion of Conservation Halton that the comprehensive constraint line proposed by the applicant is not in accordance with several goals, objectives and policies of the Official Plan.

Section 8 – Conclusion

The subject lands contain a noteworthy amount of natural heritage features and hazardous lands including but not limited to: watercourses, fish habitat, woodlands, threatened species habitat, valleys, flood plains, and an environmentally sensitive area. These features are recognized through designations in the Parkway Belt West Plan, Oakville Official Plan, and Subwatershed Study.

Conservation Halton staff does recognize that should development take place on part of the subject lands, it could provide an opportunity for some improvements, should conditions be required as part of development. For example, improvements could include: dedication of the constraint lands to a public agency, removal of the pond and waterfall structure, removal of numerous structures in or within close proximity to the valley, and enhancement of the valley through native landscaping.

The comprehensive constraint line proposed by the applicant includes the majority of natural heritage features, hazardous lands, and associated setbacks with the exception of the significant habitat of redbreasted dace. In accordance with the Provincial Policy Statement, as well as the Town of Oakville Official Plan, development and site alteration are prohibited in significant habitat of threatened species. Therefore, it is the opinion of Conservation Halton staff that the applicant has not demonstrated that the development proposed is in accordance the policies regarding threatened species in these documents.

Conservation Halton staff have suggested where the constraint line should be. As noted in Section 2.3, this is a conservative analysis and staff may accept a new meander belt width

delineation from a professional engineer or qualified fluvial geomorphologist and/or upon notice that MNR is satisfied with the delineation of the habitat.

Section 9 - Recommendations

Based on the foregoing, should the Ministry of Municipal Affairs and Housing and/or the Town of Oakville decide to proceed with a decision on the subject applications, Conservation Halton staff recommend the following:

1. Parkway Belt West Plan (2362 Upper Middle Road): That the lands in the Comprehensive Constraint Line as illustrated by Conservation Halton in Figure 1 dated October 2005, remain in the Parkway Belt West Plan. Staff would also support and encourage the dedication of these lands including those that are part of 2332 and 2322 Upper Middle Road to a public agency, such as the Town of Oakville.
2. Town Official Plan and Zoning Amendment and/or Special Study Area (2362, 2332 and 2322 Upper Middle Road): That the lands in the Comprehensive Constraint Line drawn by Conservation Halton in Figure 1 dated October 2005, be designated and zoned as Open Space, unless an alternative constraint regarding significant habitat is accepted by MNR, or delineated by a professional engineer or qualified fluvial geomorphologist to the satisfaction of Conservation Halton. Staff would be interested in working with Town staff to develop policies for a Special Study Area to address protection of constraint areas. Staff would also support and encourage the dedication of these lands to a public agency, such as the Town of Oakville, if it is not accomplished through the Parkway Belt West process.

We trust the above comments are of assistance on this matter. If you require any further information, please contact the undersigned at ext. 225.

Yours truly,

Michelle Cizmar
Environmental Planner

Encl.

c.c. Alan Ramsay, Town of Oakville
Terri Fancy and John Pisapio, Aurora MNR
Doug Corbett, Region of Halton
Dan Marion, Legend Creek Homes
Beatrix Morrallee, POWER Committee

File: Oakville (2005), Parkway Belt West MMAH File No. 24-PBA-001-178

